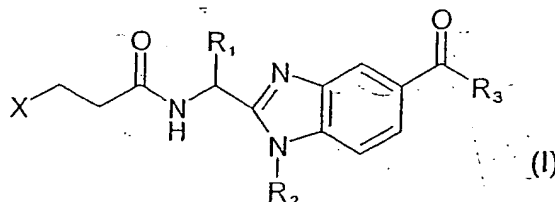


AMENDMENTS TO THE CLAIMS

Claim 1. (currently amended) A compound of formula (I)



or a pharmaceutical acceptable salt or ester thereof,

wherein

X is -CONHOH, -COOH, -OH, or -SH;

R₁ is selected from the group consisting of C₁₋₆ alkyl, C₃₋₁₀ cycloalkyl, C₁₋₆ alkylmercapto, C₁₋₆ alkylthio-C₁₋₆ alkyl, C₁₋₆ alkylhydroxy, C₁₋₆ alkylcarboxy, C₁₋₆ alkylamide, C₁₋₆ alkylamino, alkylamino-C₁₋₆ alkyl, dialkylamino-C₁₋₆ alkyl, C₁₋₆ alkylamidine, C₁₋₆ alkylguanidine; an unsubstituted or substituted aryl group, an unsubstituted or substituted heteroaryl group, an unsubstituted or substituted C₁₋₆ alkylaryl group, an unsubstituted or substituted C₁₋₆ alkylheteroaryl group and a side ~~chain~~ ~~chains~~ of a natural alpha amino acid;

with the proviso that R₁ cannot be hydrogen or tert-butyl;

R₂ is selected from the group consisting of C₁₋₆ alkyl, C₂₋₆ alkenyl, C₃₋₁₀ cycloalkyl, C₁₋₆ alkyl-C₃₋₁₀ cycloalkyl, C₃₋₇ heterocycloalkyl, C₁₋₆ alkoxy, C₁₋₆ alkylamino, C₁₋₆ alkylmercapto, C₁₋₆ alkylhydroxy, thio C₁₋₆ alkyl, alkylamino-C₁₋₆ alkyl, dialkylamino-C₁₋₆ alkyl, an unsubstituted or substituted aryl group, an unsubstituted or substituted heteroaryl group, an unsubstituted or substituted C₁₋₆ alkylaryl group and an unsubstituted or substituted C₁₋₆ alkylheteroaryl group;

R₃ is -NHCH(R₄)COR₅, -NR₆R₇, -NHR₇ or -OR₇;

R₄ is selected from the group consisting of hydrogen and a side chain of a natural alpha amino acid;

R₅ is amino, hydroxy, C₁₋₆ alkoxy or -NH-C₁₋₆ alkyl;

R₆ and R₇ are identical or different and are independently of each other selected from the group consisting of C₃₋₇ heterocycloalkyl, an unsubstituted or substituted C₁₋₆ alkyl- C₃₋₇ heterocycloalkyl group, an unsubstituted or substituted aryl group, an unsubstituted or substituted heteroaryl group, an unsubstituted or substituted C₁₋₆ alkylaryl group and an unsubstituted or substituted C₁₋₆ alkylheteroaryl group;

wherein a substituted group is substituted with one, two or three substituents independently selected from halogen, hydroxy, amino, mercapto, nitro, cyano, trifluoromethyl, C₁₋₆ alkyl, C₁₋₆ alkoxy, thioC₁₋₆ alkyl, C₁₋₆ alkylhydroxy, C₁₋₆ alkylamino, alkylamino-C₁₋₆ alkyl and dialkylamino-C₁₋₆ alkyl.

Claim 2. (original) A compound according to claim 1, wherein X is -CONHOH.

Claim 3. (original) A compound according to claim 1, wherein X is -COOH.

Claim 4. (original) A compound according to claim 1, wherein X is selected among -OH and -SH.

Claim 5. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R₁ is a side chain of a natural alpha amino acid selected from the group consisting of ~~such as~~ alanine, arginine, asparagine, aspartic acid, cysteine, glutamin, glutamic acid, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, serine, threonine, tryptophan, tyrosine and valine.

Claim 6. (currently amended) A compound according to claim 1 ~~any of claims 1-4~~, wherein R₁ is C₁₋₆ alkyl, C₃₋₁₀ cycloalkyl, C₁₋₆ alkylmercapto, C₁₋₆ alkylthio-C₁₋₆ alkyl, C₁₋₆ alkylhydroxy, C₁₋₆ alkylcarboxy, C₁₋₆ alkylamide, C₁₋₆ alkylamino, alkylamino-C₁₋₆ alkyl, dialkylamino-C₁₋₆ alkyl, C₁₋₆ alkylamidine, C₁₋₆ alkylguanidine, an unsubstituted or substituted aryl group, an unsubstituted or substituted heteroaryl group, an unsubstituted or substituted C₁₋₆ alkylaryl group or an unsubstituted or substituted C₁₋₆ alkylheteroaryl group.

Claim 7. (currently amended) A compound according to claim 1 ~~any of claims 1-4~~, wherein R₁ is ethyl, isobutyl, 2- (methylsulfanyl) ethyl, 4-aminobutyl, benzyl, 4-hydroxybenzyl, 2-phenylethyl and naphth-1-yl-methyl.

Claim 8. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R₂ is selected from the group consisting of C₁₋₆ alkyl, C₃₋₁₀ cycloalkyl, C₁₋₆ alkyl-C₃₋₁₀ cycloalkyl, C₁₋₆ alkylamino, C₁₋₆ alkylhydroxy, an unsubstituted or substituted C₁₋₆ alkylaryl group and an unsubstituted or substituted C₁₋₆ alkylheteroaryl group, wherein a substituted group is substituted with one, two or three substituents independently selected from halogen, hydroxy, amino, mercapto, nitro, cyano, trifluoromethyl, C₁₋₆ alkyl, C₁₋₆ alkoxy, and thioC₁₋₆ alkyl.

Claim 9. (currently amended) A compound according to claim 1 ~~any of claims 1-7~~, wherein R₂ is selected from the group consisting of ethyl, propyl, butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclobutylmethyl, cyclohexylmethyl, cyclohexylethyl, aminoethyl, aminopropyl, aminobutyl, hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, an phenyl, fluorosubstituted phenyl, chlorosubstituted phenyl, benzyl, fluorosubstituted benzyl, chlorosubstituted benzyl, thiophenylethyl and furanylmethyl.

Claim 10. (original) A compound according to claim 9, wherein R₂ is butyl, cyclopropyl, cyclohexylmethyl, 2-aminoethyl, 2-hydroxyethyl, benzyl, 2-chlorobenzyl, 4-chlorobenzyl, 2,6-difluorobenzyl, 2-thiophen-2-ylethyl or furan-2-ylmethyl.

Claim 11. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, wherein R₃ is -NHCH(R₄)COR₅.

Claim 12. (currently amended) A compound according to claim 1 ~~any of claims 1-10~~, wherein R₃ is -NHR₇ or -NR₆R₇.

Claim 13. (currently amended) A compound according to claim 1 ~~any of claims 1-10~~, wherein R₃ is -OR₇.

Claim 14. (currently amended) A compound according to claim 1 ~~any of claims 1-11~~, wherein R₄ is a side chain of a natural alpha amino acid selected from the group consisting of ~~such as~~ alanine, arginine, asparagine, aspartic acid, cysteine, glutamin, glutamic acid, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, serine, threonine, tryptophan, tyrosine and valine.

Claim 15. (currently amended) A compound according to claim 1 ~~any of claims 1-11, 14~~, wherein R₄ is hydrogen.

Claim 16. (currently amended) A compound according to claim 1 ~~any of claims 1-11, 14-15~~, wherein R₅ is C₁₋₆ alkoxy.

Claim 17. (currently amended) A compound according to claim 1 ~~any of claims 1-11, 14-16~~, wherein R₅ is methoxy, ethoxy, propoxy or butoxy.

Claim 18. (currently amended) A compound according to claim 1 ~~any of claims 1-10, 12-13~~, wherein R₆ or R₇ is C₃₋₇ heterocycloalkyl or an unsubstituted or substituted C₁₋₆ alkyl-C₃₋₇ heterocycloalkyl group.

Claim 19. (currently amended) A compound according to claim 1 ~~any of claims 1-10, 12-13~~, wherein R₆ or R₇ is an unsubstituted or substituted aryl group, an unsubstituted or substituted heteroaryl group, an unsubstituted or substituted C₁₋₆ alkylaryl group or an unsubstituted or substituted C₁₋₆ alkylheteroaryl group.

Claim 20. (original) A compound according to claim 1 selected from the group consisting of

{{1-cyclopropyl-2-[1- (3-mercapto-propionylamino)-propyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

{{1- (4-chloro-benzyl)-2-[1- (3-mercapto-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

N- {1- [1-benzyl-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-methylsulfanyl-propyl}-succinamic acid,

N-{1-[1-butyl-5-(methoxycarbonylmethyl-carbamoyl)-1H-benzoimidazol-2-yl]-2-phenyl-ethyl}-succinamic acid,

N-{1- [1-furan-2-ylmethyl-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-phenyl-ethyl}-succinamic acid,

N-{1- [1- (4-chloro-benzyl)-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-phenyl-ethyl}-succinamic acid,

N-{1- [1-cyclopropyl-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-phenyl-propyl}-succinamic acid,

N-{1- [1-cyclohexylmethyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-phenyl-propyl}-succinamic acid,

N-{1- [1- (2-chloro-benzyl)-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-phenyl-propyl}-succinamic acid,

N-{1- [1-cyclopropyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-propyl}-succinamic acid,

N-{1- [1-furan-2-ylmethyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-propyl}-succinamic acid,

N-{1-[1-benzyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-propyl}-succinamic acid,

N-{1-[1-cyclopropyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-methyl-butyl}-succinamic acid,

N-{1-[1-butyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-methyl-butyl}-succinamic acid,

N-{1-[1-benzyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-methyl-butyl}-succinamic acid,

N-{1-[1-cyclopropyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-methylsulfanyl-propyl}-succinamic acid,

N-{1-[5-(methoxycarbonylmethyl-carbamoyl)-1-(2-thiophen-2-yl-ethyl)-1 H-benzoimidazol-2-yl]-2-naphthalen-1-yl-ethyl}-succinamic acid,

N-{1- [1-butyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-naphthalen-1-yl-ethyl}-succinamic acid,

(({2-[5-amino-1-(3-mercapto-propionylamino)-pentyl]-1-cyclohexylmethyl-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

(({1-cyclopropyl-2-[2-(4-hydroxy-phenyl)-1- (3-mercapto-propionylamino)-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

(({1-cyclohexylmethyl-2-[2-(4-hydroxy-phenyl)-1- (3-mercapto-propionylamino)-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

{{1-(2-hydroxy-ethyl)-2-[1-(3-mercapto-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

N-{5-amino-1- [1-cyclopropyl-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol- 2-yl]-pentyl}-succinamic acid,

N-{5-amino-1-[1-cyclohexylmethyl-5-(methoxycarbonylmethyl-carbamoyl)-1H-benzoimidazol-2-yl]-pentyl}-succinamic acid,

N-[1-[1-cyclopropyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-(4-hydroxyphenyl)-ethyl]-succinamic acid,

N-[1-[1-cyclohexylmethyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-(4-hydroxyphenyl)-ethyl]-succinamic acid,

N-{1-[1-(2-hydroxy-ethyl)-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-phenyl-ethyl}-succinamic acid,

N-{1-[1-(2-hydroxy-ethyl)-5-(methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-3-methylbutyl}-succinamic acid,

{{1-cyclopropyl-2-[1- (3-hydroxycarbamoyl-propionylamino)-propyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

N-{1-[1-benzyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]-2-naphthalen-1-yl-ethyl}-succinamic acid,

{{1-furan-2-ylmethyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-propyl]-1- H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

{{1-benzyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-propyl]-1H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

{{1-cyclopropyl-2- [1- (3-hydroxycarbamoyl-propionylamino)-3-methyl-butyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

{{1-butyl-2- [1- (3-hydroxycarbamoyl-propionylamino)-3-methyl-butyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

{{1-benzyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-3-methyl-butyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,

(1-cyclopropyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-3-methylsulfanyl-propyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-cyclohexylmethyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-3-methylsulfanyl-propyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-benzyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-3-methylsulfanyl-propyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-furan-2-ylmethyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-(4-chloro-benzyl)-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-cyclopropyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-3-phenyl-propyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-cyclohexylmethyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-3-phenyl-propyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-(2-chloro-benzyl)-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

[2-[1-(3-hydroxycarbamoyl-propionylamino)-2-naphthalen-1-yl-ethyl]-1- (2-thiophen-2-yl-ethyl)-1 H-benzoimidazole-5-carbonyl]-amino)-acetic acid methyl ester,

(1-butyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-naphthalen-1-yl-ethyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-benzyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-naphthalen-1-yl-ethyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(1-butyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(2-[5-amino-1-(3-mercapto-propionylamino)-pentyl]-1-cyclopropyl-1H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

(2-[5-amino-1-(3-mercapto-propionylamino)-pentyl]-1-benzyl-1H-benzoimidazole-5-carbonyl)-amino)-acetic acid methyl ester,

{{1-(2-amino-ethyl)-2-[1-(3-mercapto-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
N- {5-amino-1- [1-benzyl-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]- pentyl}-succinamic acid,
N- {1- [1- (2-amino-ethyl)-5- (methoxycarbonylmethyl-carbamoyl)-1 H-benzoimidazol-2-yl]- 2-phenyl-ethyl}-succinamic acid,
{{2-[5-amino-1-(3-hydroxycarbamoyl-propionylamino)-pentyl]-l-cyclopropyl-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
{{2- [5-amino-1- (3-hydroxycarbamoyl-propionylamino)-pentyl]-1-cyclohexylmethyl-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
{{2-[5-amino-1-(3-hydroxycarbamoyl-propionylamino)-pentyl]-1-benzyl-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
{{1-(2-amino-ethyl)-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-phenyl-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
{{1-cyclopropyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-(4-hydroxy-phenyl)-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
{{1-cyclohexylmethyl-2-[1-(3-hydroxycarbamoyl-propionylamino)-2-(4-hydroxy-phenyl)-ethyl]-1 H-benzoimidazole-5-carbonyl}-amino)-acetic acid methyl ester,
[[2-[1-(3-hydroxycarbamoyl-propionylamino)-2-phenyl-ethyl]-l- (2-hydroxy-ethyl)-l H-benzoimidazole-5-carbonyl]-amino}-acetic acid methyl ester; and stereoisomers thereof.

Claim 21. (currently amended) A compound according to claim 1 ~~any of the preceding claims~~, which in a PDF assay exhibits an IC₅₀ value of less than 500 µM, preferably less than 100 µM, more preferably less than 50 µM, even more preferably less than 1 µM, especially less than 500 nM, particular 300 nM or less.

Claims 22-25. (cancelled)

Claim 26. (currently amended) A pharmaceutical composition comprising, as an active ingredient, a compound according to claim 1 ~~any of the preceding claims~~ or a pharmaceutically acceptable salt thereof together with a pharmaceutically acceptable carrier or diluent.

Claim 27. (original) A pharmaceutical composition according to claim 26 comprising a second active substance having antibacterial activity.

Claim 28. (currently amended) A pharmaceutical composition according to claim 26 ~~or 27~~, wherein the composition is in unit dosage form comprising from about 1 µg to about 1000 mg ~~such as, e. g., from about 10 µg to about 500 µg, from about 0.05 to about 100 µg or from about 0.1 to about 50 mg~~ of the active substance or a pharmaceutically acceptable salt or ester thereof.

Claims 29-30. (cancelled)

Claim 31. (currently amended) A pharmaceutical composition claim according to claim 1 ~~any of claims 26-30~~ for oral, nasal, transdermal, pulmonal or parenteral administration.

Claim 32. (currently amended) A method for the treatment of an ailment ~~ailments~~, the method comprising administering to a subject in need thereof an effective amount of a compound according to claim 1 ~~any of claims 1-25~~ or a pharmaceutically acceptable salt thereof, ~~or of a composition according to any of claims 26-31.~~

Claim 33. (currently amended) A method according to claim 32, wherein the effective amount of a compound ~~according to any of claims 1-25~~ or a pharmaceutical acceptable salt or ester thereof is in the range of from about 1 μg to about 1000 μg ~~such as, e.g., from about 10 μg to about 500 μg , from about 0.05 to about 100 μg or from about 0.1 to about 50 μg per day.~~

Claims 34-38. (cancelled)

Claim 39. (new) A method for the treatment of a patient suffering from or susceptible to a bacterial infection, the method comprising administering to the patient an effective amount of a compound of claim 1.

Claim 40. (new) The method of claim 39 wherein the patient is suffering from a bacterial infection.

Claim 41. (new) The method of claim 39 wherein the patient has been identified and selected for treatment as suffering from a bacterial infection and the compound is administered to the selected patient.

Claim 42. (new) The method of claim 39 wherein the patient is suffering from an infection an organism belonging any of the genera *Staphylococcus*, *Enterococcus*, *Streptococcus*, *Haemophilus*, *Moraxella*, *Escherichia*, *Mycobacterium*, *Mycoplasma*, *Pseudomonas*, *Chlamydia*, *Rickettsia*, *Klebsiella*, *Shigella*, *Salmonella*, *Bordetella*, *Clostridium*, *Helicobacter*, *Campylobacter*, *Legionella* and *Neisseria*.

Claim 43. (new) The method of claim 39 wherein the patient is suffering from an infection associated with an organism belonging to the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Enterococcus faecium*, *Enterococcus faecalis*, *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Moraxella catarrhalis*, *Escherichia coli*, *Mycobacterium tuberculosis*, *Mycobacterium ranae*, *Mycoplasma pneumoniae*, *Pseudomonas aeruginosa*, *Chlamydia*, *Rickettsiae*, *Klebsiella pneumoniae*, *Shigella flexneri*, *Salmonella typhimurium*, *Bordetella pertussis*, *Clostridia perfringens*, *Helicobacter pylori*, *Campylobacter jejuni*, *Legionella pneumophila* and *Neisseria gonorrhoeae*.